

(19) World Intellectual Property Organization  
International Bureau



PCT



(43) International Publication Date  
22 September 2005 (22.09.2005)

(10) International Publication Number  
**WO 2005/086730 A3**

(51) International Patent Classification:  
**G01F 1/44** (2006.01) **G01F 1/42** (2006.01)

(21) International Application Number:  
PCT/US2005/007214

(22) International Filing Date: 4 March 2005 (04.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/550,466 5 March 2004 (05.03.2004) US

(71) Applicant and

(72) Inventor: **KURZ, Jerome, L.** [US/US]; 33 Los Robles Road, Carmel Valley, CA 93924 (US).

(74) Agent: **GAMSON, Robert, M.**; Armstrong, Kratz, Quintos, Hanson & Brooks, LLP, 502 Washington Avenue, Suite 220, Towson, MD 21204 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

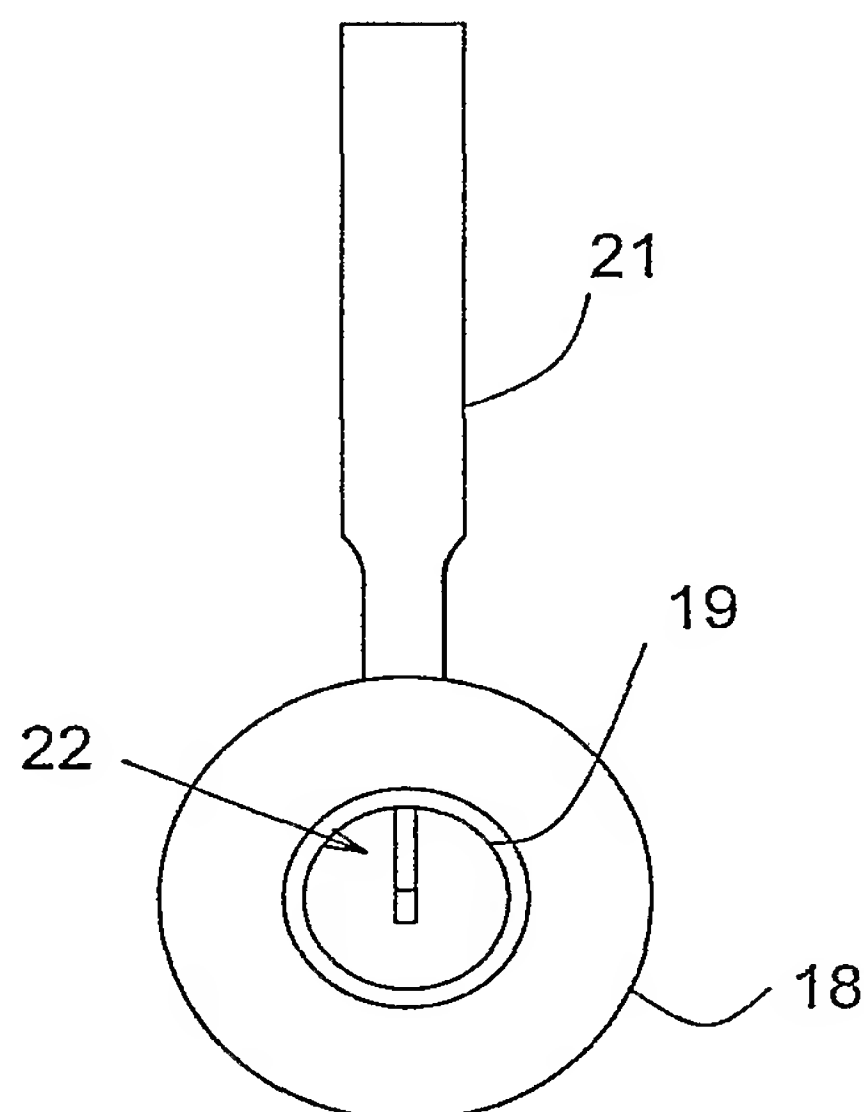
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
17 August 2006

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: FLUID FLOW METER CONDITIONING BODY WITH IMMUNITY TO INLET/OUTLET FLOW DISTURBANCES



(57) Abstract: Method and device for accurately measuring fluid flow in a conduit. A fluid flow meter conditioning body (10), in-line with the conduit, conditions the fluid flow so as to provide a flattened and invariant fluid velocity profile. The device provides high immunity to upstream and downstream non-uniform fluid velocity profiles. Fluid diffuses (15 and 18) adapt the device to different conduit sizes, eliminate field welding and conduit fittings. In a preferred embodiment thermal convection mass flow sensors and circuitry are used to further improve the accuracy of the measurement of the fluid flow.

WO 2005/086730 A3